

FIG.1

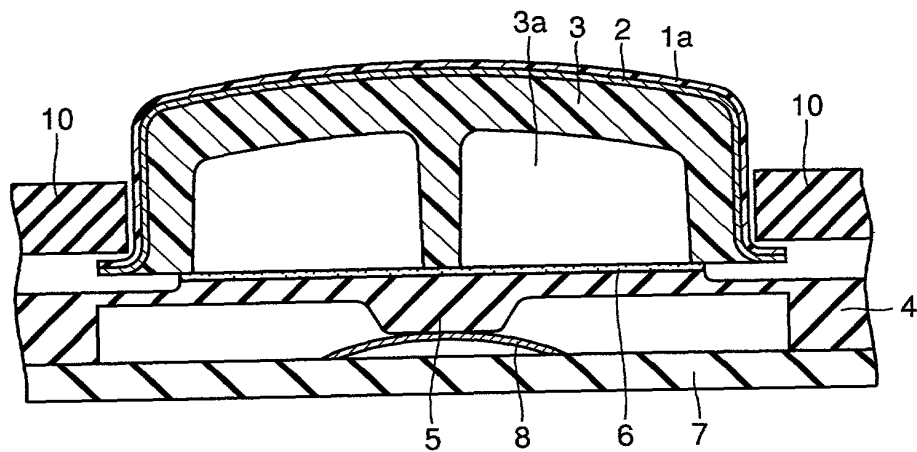


FIG.2

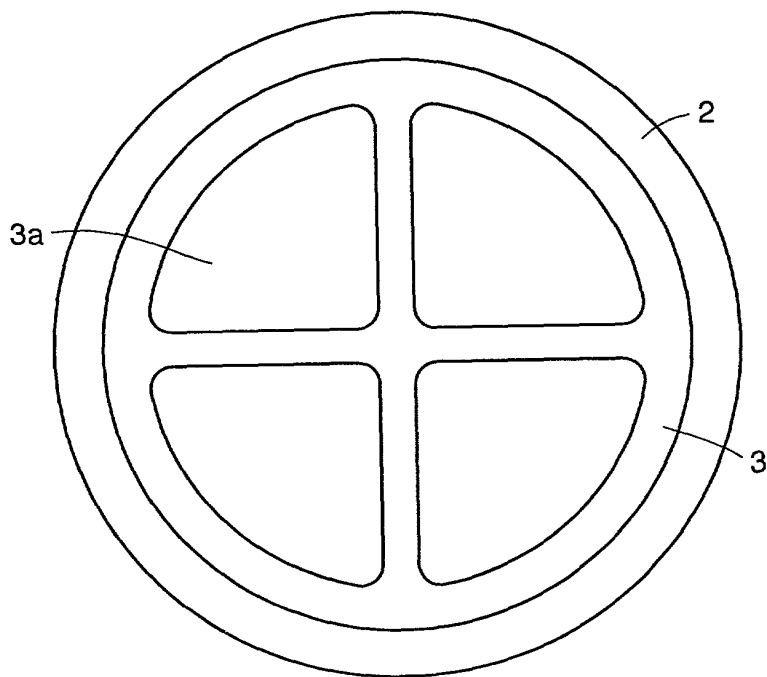


FIG.3

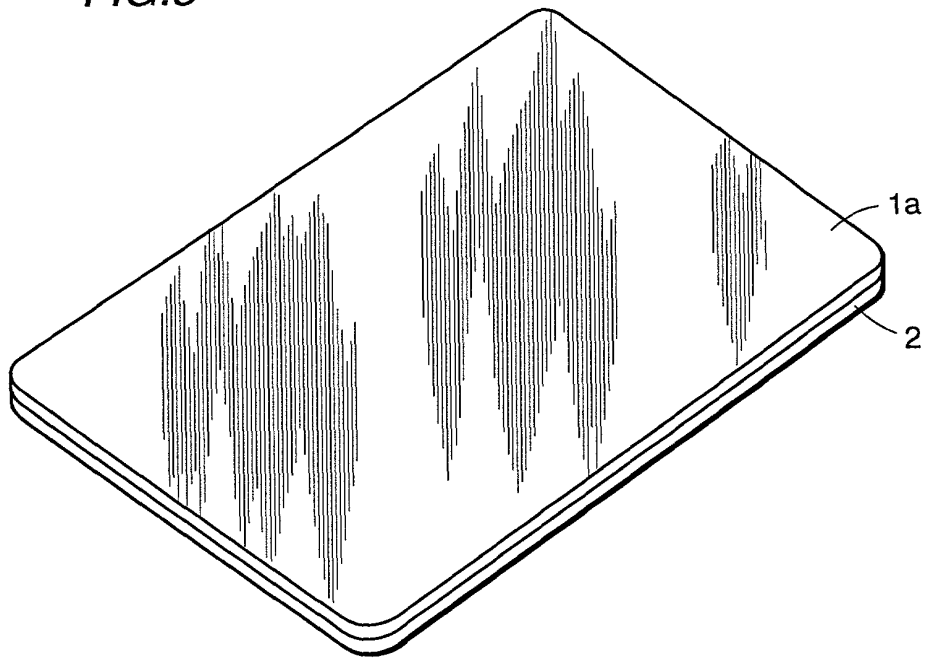


FIG.4

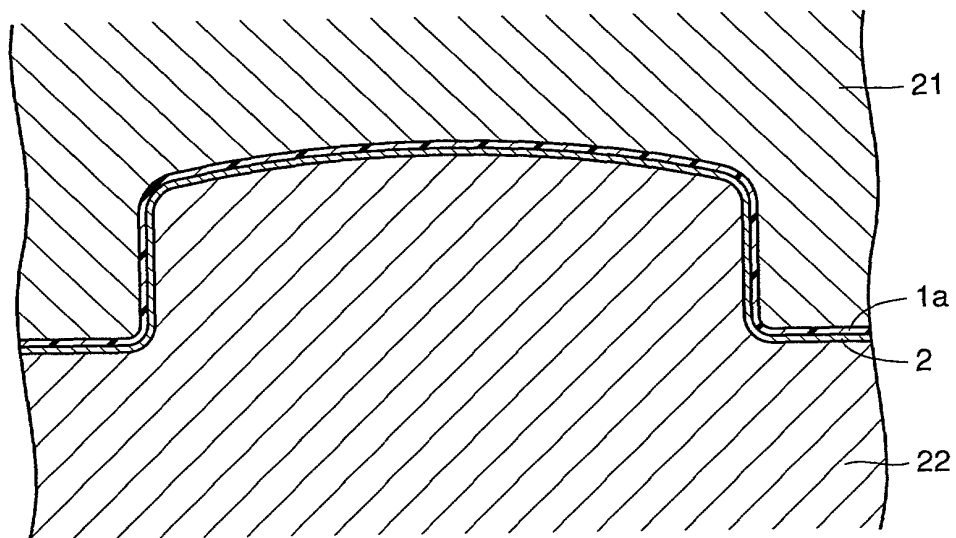


FIG.5

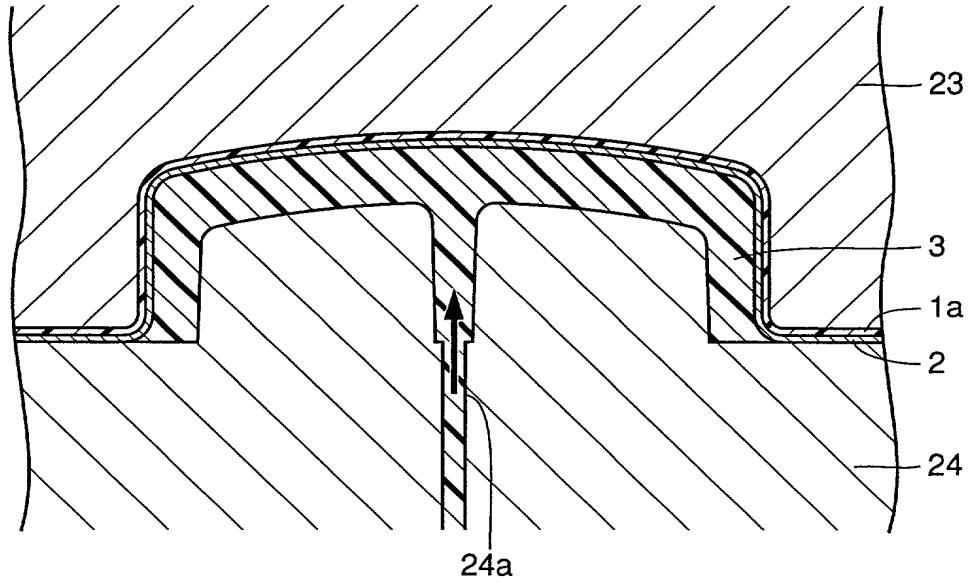


FIG.6

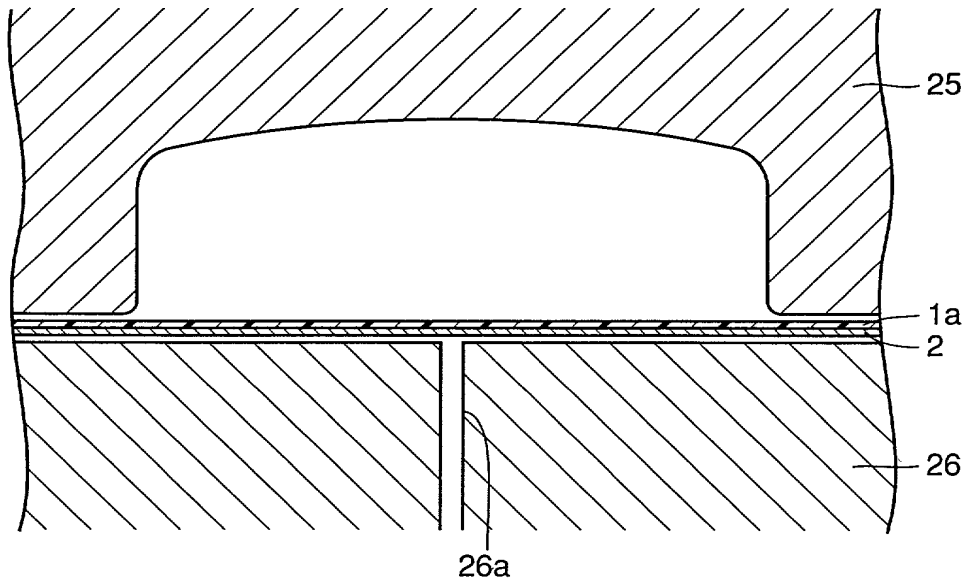


FIG.7

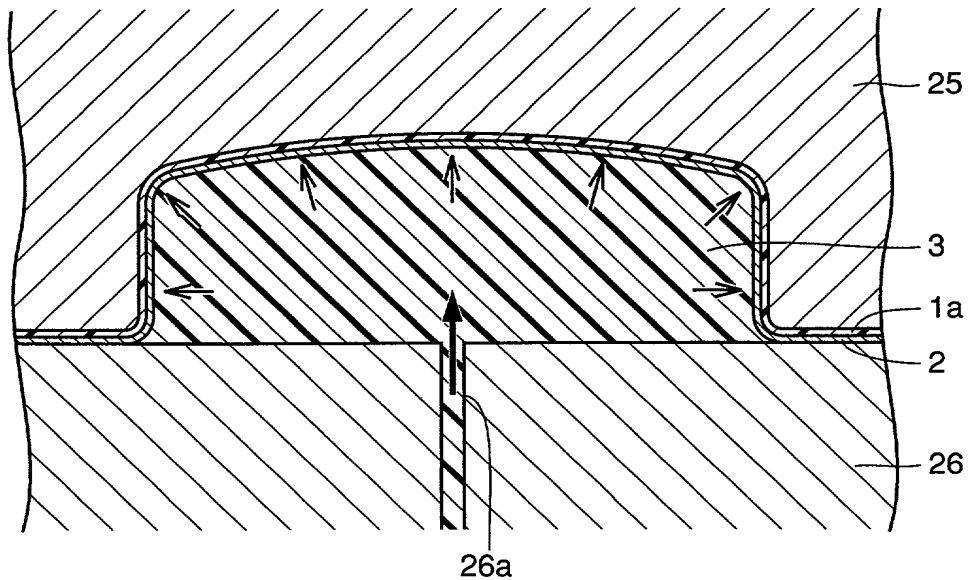


FIG.8

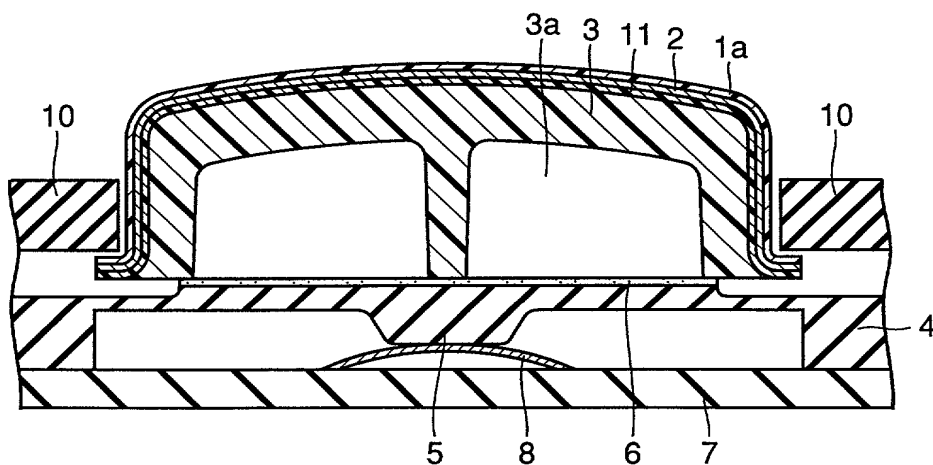


FIG.9

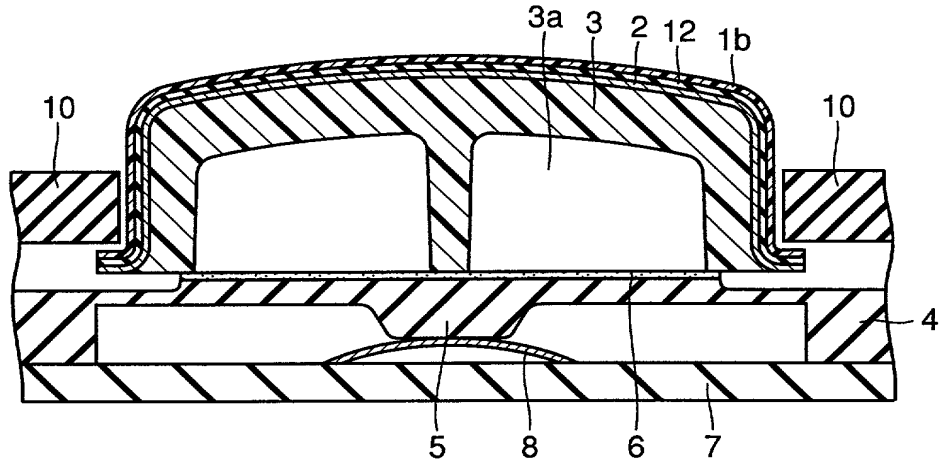
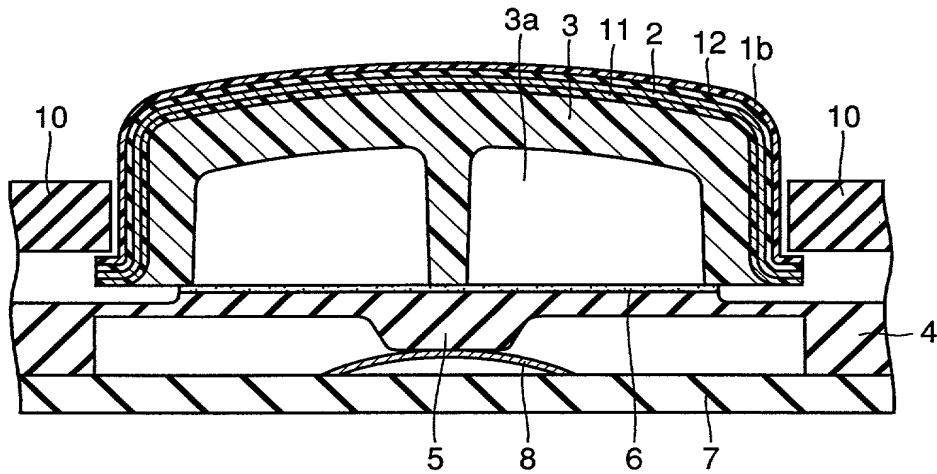


FIG.10



[illegible]

This cross-sectional view shows a substrate (4) with a trench (5) and a gate structure (6) on its surface. A passivation layer (7) is formed over the gate structure and the trench. The passivation layer (7) has a central portion (8) that is recessed, forming a cavity (9). The cavity (9) is filled with a material (10). The passivation layer (7) is formed by a first layer (11) and a second layer (12a, 12b). The first layer (11) is a thin layer that covers the gate structure (6) and the trench (5). The second layer (12a, 12b) is a thicker layer that is formed over the first layer (11) and the trench (5). The second layer (12a, 12b) has a central portion (12a) that is recessed, forming a cavity (9). The cavity (9) is filled with a material (10). The second layer (12a, 12b) is formed by a first layer (11) and a second layer (12a, 12b). The first layer (11) is a thin layer that covers the gate structure (6) and the trench (5). The second layer (12a, 12b) is a thicker layer that is formed over the first layer (11) and the trench (5). The second layer (12a, 12b) has a central portion (12a) that is recessed, forming a cavity (9). The cavity (9) is filled with a material (10). The second layer (12a, 12b) is formed by a first layer (11) and a second layer (12a, 12b). The first layer (11) is a thin layer that covers the gate structure (6) and the trench (5). The second layer (12a, 12b) is a thicker layer that is formed over the first layer (11) and the trench (5). The second layer (12a, 12b) has a central portion (12a) that is recessed, forming a cavity (9). The cavity (9) is filled with a material (10).

FIG.13

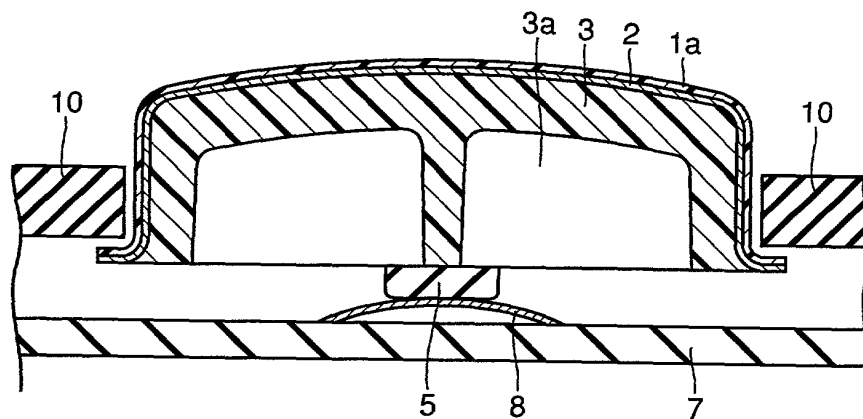


FIG.14

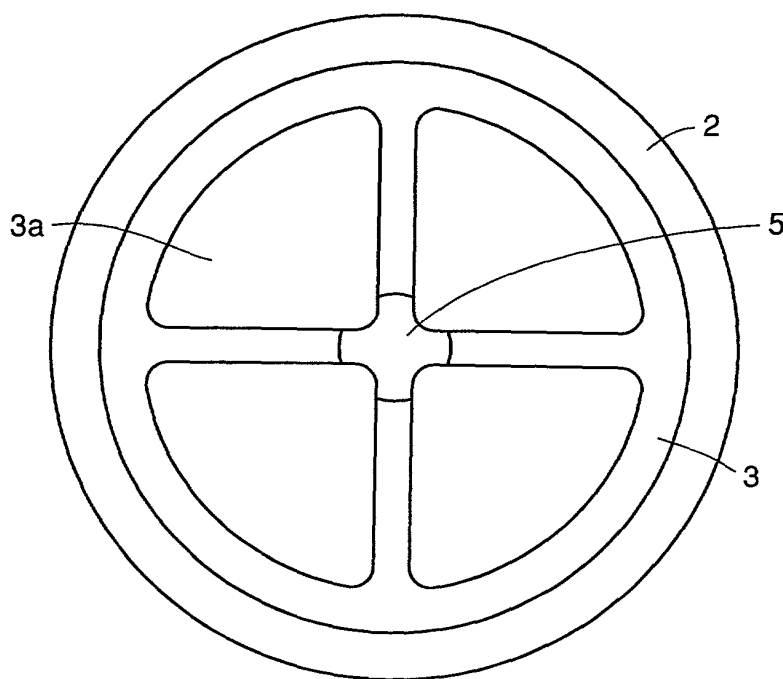


FIG.15 PRIOR ART

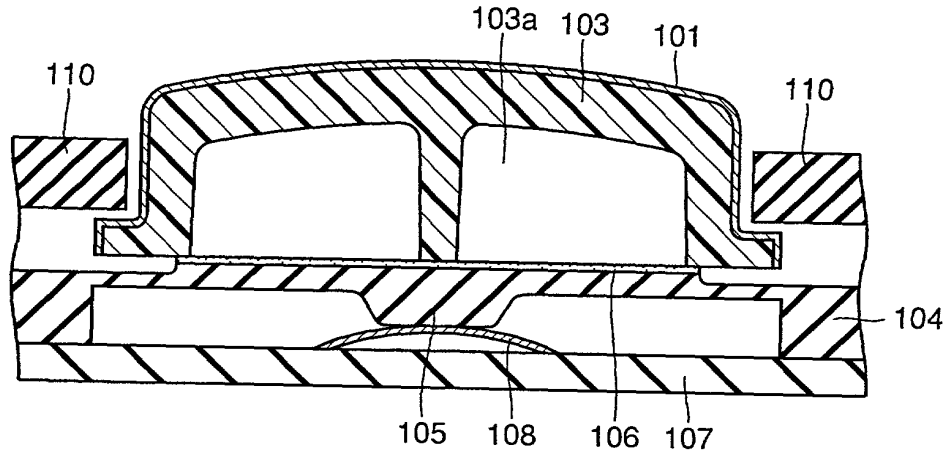


FIG. 15 PRIOR ART